

Spot Anthracnose of Wax Myrtle¹

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INTRODUCTION: More than 40 species (identity often based upon host specificity) of the fungus *Elsinoe* are reported as pathogens of trees and shrubs (Sinclair *et al.* 1987). One of them, apparently an unnamed species, causes serious leaf spots and leaf distortion of wax myrtle (*Myrica cerifera* L.) in Florida. Of the species listed in Sivanesan (1984) none are identified as pathogens of wax myrtle, yet damage to this host is common and sometimes severe in Florida nurseries.

Wax myrtle is native to the southeastern coastal plain of the United States (Barnard *et al.* 1991), and is grown extensively in landscape plantings as a shrub or small tree. The plant has been used for its alleged medicinal properties, and the waxy coating of the fruit is used for "bayberry" candles.

SYMPTOMS: Tiny pale brown spots may develop on leaves or stems (Fig. 1). A deep reddish-crimson color is associated with leaf lesions which in time may coalesce to form larger irregular spots. If infection is heavy, leaf stunting and distortion may result from the effect of hormones secreted by the fungus (Sinclair *et al.* 1987). Spot anthracnose or scab diseases (those caused by *Elsinoe* and its imperfect stage, *Sphaceloma*) are often, but not always, characterized by raised lesions.



Symptoms of spot anthracnose may initially be mistaken for Septoria or Colletotrichum leaf spots, but as the disease progresses, characteristic puckering on both leaf surfaces and distorted growth caused by hyperplasia of the host tissue can occur. Lesions on wax myrtle foliage are often raised slightly on their border. Centers of the leaf spots are generally depressed and tan in color.

Fig. 1. Wax myrtle showing tiny leaf spots and leaf distortion caused by *Elsinoe* sp.
Photography credit: Jeffrey W. Lotz.

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CAUSAL AGENT: Scattered throughout the lesions are black fruiting structures (ascostromata) of the *Elsinoe* fungus (Hanlin 1990). Conidia are produced by the imperfect or asexual state (*Sphaceloma*) and precede the ascostromata. Conidia are produced in structures that appear as blisters (acervuli) which may be observed with a hand lens. Often, the conidial state is the only one seen.

CONTROL: Cultural control is an integral portion of disease control. Reduce the time and amount of moisture on plant surfaces by modifying watering practices, and improve ventilation through plant spacing. The application of chlorothalonil + thiophanate methyl (ConSyst[®]) or thiophanate methyl and zinc ion + maneb (Zyban[®] or Duosan[®]) should provide chemical control when applied at recommended rates (Simone *et al.* 1998).

SURVEY AND DETECTION: Look for tiny pale brown spots with crimson borders accompanied by leaf distortion, puckering, and stunting.

LITERATURE CITED

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